

**CLAIMS**

We Claim:

1. In a system for returning a number of job candidates based on a current query specifying desired criteria for the job candidates, a method of refining the query in 5 an attempt to return a number of candidates within a given range, the method comprising:
  - determining whether a number of job candidates matching a current query is outside the given range; and
  - responsive to determining the number of job candidates is outside the given range, generating a proposed modification to the query predicted to bring the number candidates 10 within or closer to the range.
2. One or more computer-readable media having computer-executable instructions for performing method of claim 1.
- 15 3. The method of claim 1 further comprising:
  - generating a new query incorporating the proposed modification.
4. The method of claim 3 further comprising:
  - generating search results via the new query.
- 20 5. The method of claim 1 wherein generating the proposed modification comprises consulting a plurality of sub-systems in a defined order.
6. The method of claim 1 wherein generating the proposed modification 25 comprises:
  - identifying a component of the query having a fully open range; and
  - generating a proposed modification indicating that the fully open range be constrained.
- 30 7. The method of claim 6 wherein identifying a component of the criteria comprises:

ranking skills appearing within job candidates according to a ranking scheme; and choosing a highly-ranked skill as the component of the criteria.

8. The method of claim 1 wherein generating the proposed modification  
5 comprises:

identifying a component of the query having a narrowed range; and  
generating a proposed modification indicating that the component having a narrowed range be relaxed.

10 9. The method of claim 1 wherein generating the proposed modification  
comprises:

identifying a component not appearing in the query as required, wherein the component is associated with at least a certain percentage of job candidates matching the current query; and

15 generating a proposed modification indicating that the component not appearing in the query as required be included in the query as required.

10. The method of claim 1 wherein generating the proposed modification  
comprises:

20 identifying a component appearing in the query as required, wherein the component is associated with a fewest number of job candidates matching the current query; and

generating a proposed modification indicating that the component appearing in the query as required not be included in the query as required.

25

11. The method of claim 1 wherein generating the proposed modification  
comprises:

identifying a set of skills associated with a primary role of a job requisition associated with the query;

30 ranking the skills in the set; and

generating a proposed modification indicating that a highest-ranked skill in the set not appearing in the query be added to the query.

12. A query modification proposing system operable in conjunction with a  
5 system for returning a number of job candidates based on a current query specifying desired criteria for the job candidates, the query modification proposing system comprising:

means for determining whether a number of job candidates matching a current query is outside a given range; and

10 means, responsive to determining the number of job candidates is outside the given range, and operable for generating a proposed modification to the query predicted to bring the number candidates within or closer to the range.

13. A computer-readable medium having encoded thereon a data structure for  
15 specifying characteristics for a search against a collection of job candidates whose data has been conceptualized according to a conceptualization scheme, the data structure comprising:

a list of desired skills conceptualized according to the conceptualization scheme;

a list of desired educational qualifications; and

20 a list of desired work experiences.

14. The computer-readable medium of claim 13, wherein the data structure further comprises:

25 an indicator that one or more items is required, whereby candidates not having the required items are not matched against the data structure.

15. The computer-readable medium of claim 13, wherein the data structure further comprises:

a skill range for one or more skills.

16. The computer-readable medium of claim 13, wherein the data structure further comprises:

a most recent indicator for one or more of the items, wherein candidates not having the items in a most recent experience do not match the data structure.

5

17. A computer-implemented method of identifying desirable job candidates, the method comprising:

extracting concepts from job candidate data of a desirable job candidate as desirable job candidate criteria; and

10 submitting the desirable job candidate criteria for matching against other job candidates.

18. The method of claim 17 wherein the job candidate data comprises an electronic representation of at least a portion of a resume of the desirable job candidate.

15

19. The method of claim 17 wherein the matching comprises conducting a search in an *n*-dimensional concept space.

20. The method of claim 17 further wherein the extracting comprises:  
accepting criteria for a plurality of criteria-determining software components, wherein the criteria-determining software components independently analyze the job candidate data.

21. The method of claim 20 wherein the software components comprise:  
25 a component for identifying a most recent role from the job candidate data for inclusion in the criteria;  
a component for identifying highest-ranked skill concepts from the job candidate data for inclusion in the criteria.

22. The method of claim 20 wherein the software components comprise:  
a component for identifying one or more companies associated with a most recent  
experience in the job candidate data for inclusion in the criteria;  
a component for identifying one or more industries associated with a most recent  
5 experience in the job candidate data for inclusion in the criteria; and  
a component for identifying a highest education level in the job candidate data for  
inclusion in the criteria.

23. The method of claim 17 further comprising:  
10 before matching job candidates via the desirable job candidate criteria, removing  
one or more of the desirable job candidate criteria based on a prioritization of the criteria.

24. A software-based system for finding job candidates having characteristics  
similar to desirable job candidate data associated with a job candidate designated as  
15 desirable, the system comprising:  
a plurality of subsystems for extracting extracted characteristics from the desirable  
job candidate data; and  
a query submitter for submitting the extracted characteristics for matching against  
a plurality of job candidates via a match engine.  
20

25. The software-based system of claim 24 wherein the subsystems comprise  
one or more of the following: an industry cloner, a company cloner, a skill cloner, a role  
cloner, and an education cloner.

26. A method of processing a job requisition specifying desirable criteria for  
job candidates, the method comprising:  
determining whether a number of job candidates matching the criteria is outside a  
desired range indicating a desired number job candidates to return;  
responsive to determining that the number the number of job candidates matching  
30 is outside the desired range, generating new criteria based on a software-generated  
proposed modification to the criteria; and

iteratively repeating at least once.

27. One or more computer-readable media comprising computer-executable instructions for performing the method of claim 26.

5

28. The method of claim 26 wherein the repeating repeats a predetermined number of times.